

**CLAIMS:**

1. An apparatus for preventing use of unauthorised disposable or consumable components and allowing use of authorised disposable or consumable components in conjunction with scientific apparatus comprising:

identification means associated with said authorised disposable or consumables, sensing means associated with said scientific apparatus, and

control means which inhibits the operation of said scientific apparatus unless said sensing means detects said identification means, said control means including storage means programmed with a stored program, and either said identification means or said control means includes one or more registers, said program when executed causes said control means to carry out the steps of:

- 1) establishing communication between said control means and said identification means and if this is not successfully completed, halting the program and returning a negative result;
- 2) interrogating one or more registers in said identification means or said control means and using the information contained therein to determine whether the component said identification means is associated with, is in an acceptable state for use with said scientific apparatus and if not, halting the program and returning a negative result;
- 3) otherwise halting the program and returning a positive result.

2. An apparatus as claimed in claim 2 wherein said program is executed every time said scientific apparatus is operated and wherein said control means will inhibit the operation of said scientific apparatus unless a positive result is returned from said program.

3. An apparatus as claimed in claims 1 or 2 wherein one or more said registers at least store information on the number or length of usage of said component.

- 12 -

4. An apparatus as claimed in any one of claims 1 to 3 wherein said identifier means comprises an interrogatable radio frequency identification device.

5. An apparatus as claimed in any one of claims 1 to 4 wherein said scientific apparatus comprises a chemical analyser and said disposable or consumable components comprise at least one reagent.

6. An apparatus as claimed in any one of claims 1 to 4 wherein said scientific apparatus comprises a medical laser system and said disposable components comprise optical fibres.

7. An apparatus as claimed in any one of claims 1 to 4 wherein said scientific apparatus comprise intra vascular diagnostic equipment adapted for internal diagnosis and treatment of a patient, and said disposable or consumable components comprise catheter means which in use conveys a portion of said vascular diagnostic equipment into the vascular cavity of said patient.

8. An apparatus as claimed in any one of claims 1 to 4 wherein said scientific apparatus comprise tissue processing equipment including slide means adapted to support said tissue in use and said disposable or consumable components comprise fixative fluids or solvents which in use fix the said tissue to said slide.

9. An apparatus as claimed in any one of claims 1 to 4 wherein said scientific apparatus comprise tissue analysing equipment including slide means adapted to support said tissue in use and said disposable or consumable components comprise slide staining means which are adapted to in use stain the said tissue.

10. An apparatus as claimed in any one of claims 1 to 4 wherein said scientific apparatus comprise haemodialysing equipment adapted to filter the blood of a patient and said disposable or consumable components comprise a dialysis unit including a

- 13 -

filter which in use removes waste products from said patient's blood which is circulated by said haemodialysing equipment.

11. A chemical analyser comprising:

a reagent dispenser including a reagent vial,  
identification means associated with said reagent vial,  
sensing means associated with said chemical analyser, and  
control means which inhibits the operation of said chemical analyser unless said sensing means detects said identification means.

12. A medical laser system for treating a patient comprising:

laser generating means,  
optical means for conveying said laser from said laser generating means to said patient,  
identification means associated with said optical means,  
sensing means associated with said medical laser system,  
control means which inhibits the operation of said medical laser system unless said sensing means detects said identification means.

13. An apparatus for preventing use of unauthorised disposable or consumable components and allowing the use of authorised disposable or consumable components in conjunction with scientific apparatus as a chemical analyser substantially as herein described with reference to and illustrated by the accompanying drawings.

14. A chemical analyser substantially as herein described with reference to and illustrated by the accompanying drawings

15. A medical laser system substantially as herein described with reference to & illustrated by the accompanying drawings